To: CN=Karen Schwinn/OU=R9/O=USEPA/C=US@EPA;CN=Carolyn Yale/OU=R9/O=USEPA/C=US@EPA;CN=Erin Foresman/OU=R9/O=USEPA/C=US@EPA;CN=Tom Hagler/OU=R9/O=USEPA/C=US@EPA;CN=Sam Ziegler/OU=R9/O=USEPA/C=US@EPA[]; N=Carolyn Yale/OU=R9/O=USEPA/C=US@EPA;CN=Erin Foresman/OU=R9/O=USEPA/C=US@EPA;CN=Tom Hagler/OU=R9/O=USEPA/C=US@EPA;CN=Sam Ziegler/OU=R9/O=USEPA/C=US@EPA[]; N=Erin Foresman/OU=R9/O=USEPA/C=US@EPA;CN=Tom Hagler/OU=R9/O=USEPA/C=US@EPA;CN=Sam Ziegler/OU=R9/O=USEPA/C=US@EPA[]; N=Tom Hagler/OU=R9/O=USEPA/C=US@EPA;CN=Sam Ziegler/OU=R9/O=USEPA/C=US@EPA[]; N=Sam Ziegler/OU=R9/O=USEPA/C=US@EPA[]
Cc: []
From: CN=Bruce Herbold/OU=R9/O=USEPA/C=US
Sent: Tue 6/21/2011 8:46:32 PM
Subject: Fw: SJ flows issue
driddle@waterboards.ca.gov
Herbold.Bruce@epamail.epa.gov

Here's their thoughts and response to my query. I am encouraged that they will at least highlight their future delta work as they write up their SJ work. Are they missing a chance to use upstream regulatory action to solve delta problems by protecting required in stream flows all the way to Chipps Island? Or would that be a Pandora's Box?

and remember that, according to Sartre, Hope was the last and greatest curse to come out of Pandora's Box

Bruce

----- Forwarded by Bruce Herbold/R9/USEPA/US on 06/21/2011 01:42 PM -----

From: Diane Riddle <DRiddle@waterboards.ca.gov>
To: Bruce Herbold/R9/USEPA/US@EPA
Cc: Adam Ballard <ABallard@waterboards.ca.gov>, Les Grober <lgrober@waterboards.ca.gov>, Mark Gowdy <MGowdy@waterboards.ca.gov>
Date: 06/17/2011 02:45 PM
Subject: Re: Fwd: SJ flows issue

Hi Bruce,
Mark forwarded your email to me on providing flows to support a migratory corridor from the SJR through the Delta and I just wanted to provide you with a quick response about what we are planning related to this issue.
This is an issue we are aware of and plan to review. However, at this point we are not planning to do so directly in our current SJR flows review process. Instead, we are planning to look at this in our comprehensive review of all of the other objectives in the Bay-Delta Plan. In our SJR flow review we are focusing on flows between the rim dams on the salmon bearing tribs to Vernalis. We understand that conditions beyond this point are important, but they involve a different set of issues that need further consideration and a wider scope. Specifically, flow paths downstream of Vernalis are largely affected by exports which raise a number of additional complicating issues. To assure that it is clear that we mean to address the flow issues downstream of Vernalis, we are planning to add a discussion of this issue in the program of implementation indicating that we will examine downstream issues in our review of the rest

of the Bay-Delta Plan.

Please let me know if you would like to discuss further. In the event that I am not here, I'm sure Les or Mark would be happy to explain further. We would also be interested in hearing your further thoughts about outflows and flows downstream of Vernalis as we work with BDCP to develop and analyze additional alternatives. Mark is coordinating that process and I'm sure would be happy to hear any thoughts you have on alternatives that should be examined.

Thanks,
Diane

Diane Riddle
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Hearings & Special Programs Section
Division of Water Rights
State Water Resources Control Board
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>>> <Herbold.Bruce@epamail.epa.gov> 6/14/2011 3:12 PM >>>
Hi guys,

In the ANPR we raised a concern you identified in the flows report and which was in the expert panel's presentation to the board about a San Joaquin migratory corridor. But I can find nothing about it in the actual rule-making process for SJ flows. Is that right? Is there an explanation? Is this something the Board thinks of as more a delta flows issue rather than an SJ flows issue or is there some other way that you think the problem will be addressed? In reviewing the results of our ANPR effort I am summarizing this concern in the paragraphs below (a very very very first draft effort).

Let me know your mind on this issue.

(I will also be sending you some great new results and my interpretation of them on X2, but that's the subject of another email)

thanks,

Bruce

Migratory Corridors.
Migratory fish rely on diverse habitats for their different life stages and they require appropriate cues and connections to allow them to find

those habitats. Outmigrating salmonids use flow as the primary cue to maneuver from their spawning grounds through the rivers to the estuary. Salinity gradients then guide them to the ocean where they mature. Mature fish follow the unique chemical signature of their natal stream to find suitable spawning habitat and produce the next generation. Along these migratory paths contaminants, temperatures, low dissolved oxygen, and predators may interfere with migratory success, but a suitable channel and suitable cues are essential.

In the SWRCB report on the flows necessary to support the fishes of concern in the delta, the Board identified a problem which may be unique to this estuary; the confluence of the Sacramento and San Joaquin rivers in their mutual delta contains almost entirely water from the Sacramento River because the flow of the San Joaquin River is diverted near the point where it enters the delta. Thus the migratory corridor for adult San Joaquin River salmon contains usually 40 km of river channel with little chemical trace of their natal streams. In developing flow needs for the San Joaquin this absence of a migratory cue for adult fish has not yet been addressed. Water dedicated in San Joaquin tributary streams is carefully managed to support spawning and growth of young in through the work of FERC, DFG and the regional boards. In the NMFS biological Opinion, attraction flows for adult steelhead are required on the Stanislaus, but no provision is made to ensure that adults in the delta will receive the chemical cues they need. Without ensuring that water from the San Joaquin tributaries supports a migratory corridor to and from the bay, the populations of these migratory fish seems unsustainable.